CE

# Installation manual

## EDS, Efficient Dosing System

Electrolux

Original instructions

# Contents

The manufacturer reserves the right to make changes to design and component specifications.

# 1 Introduction

The Efficient Dosing System (EDS) is capable of connecting and synchronizing directly to the washer extractor with Compass Control, Compass Pro or Clarus Control via a data cable. In Compass Control and Compass Pro any of the RS232 connections in the control system can be used. In Clarus Control the X10 connection on CPU card A1 can be used.

The EDS controller automatically adjusts the chemical dosage rate up or down based on the weight instruction from the washer extractor. This system will optimize the wash process, reduce chemical- and energy costs and deliver a total cost solution to the customer.

Up to 50 wash programs may be stored with the EDS controller.

The EDS controller receives a signal from the washer extractor at predetermined times in the wash program.

Once a signal is received the EDS injects specific product(s) at that time in proportion to the weight of the linen as determined via the automatic saving system.



fig.W01144
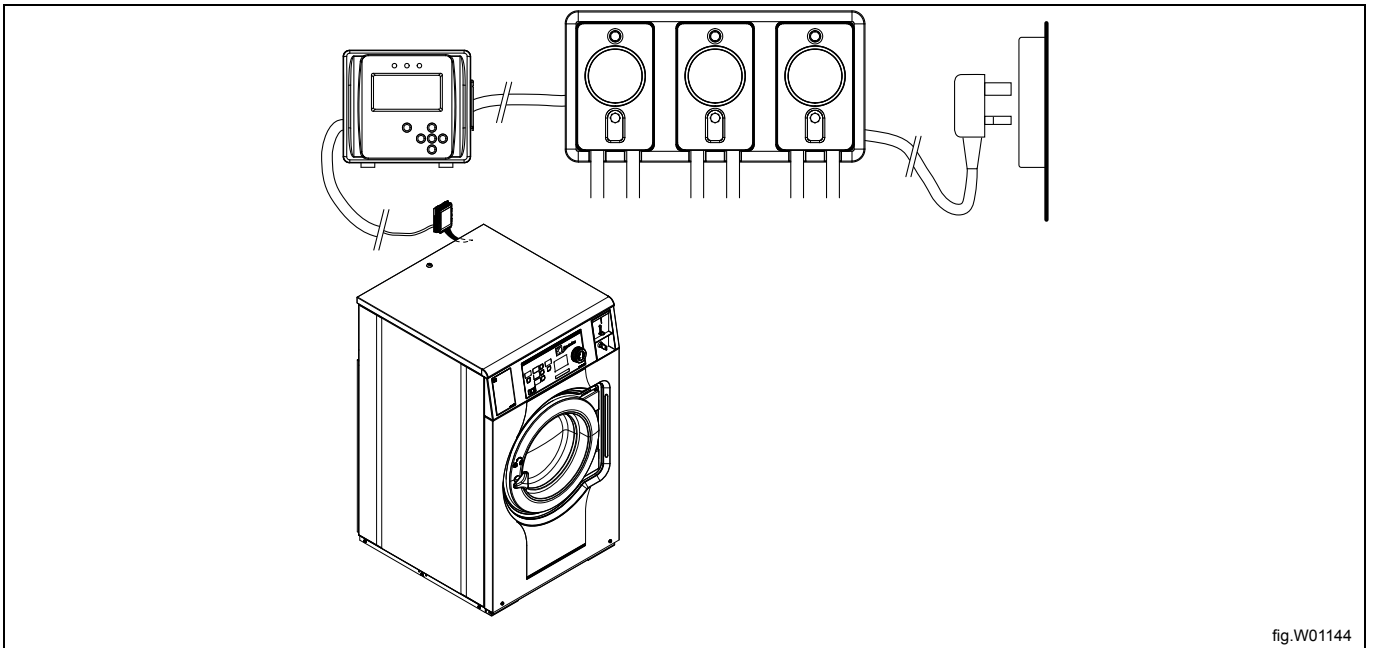
The pump-stand operates on 115VAC / 60 Hz, 220VAC / 60Hz, or 230VAC / 50 Hz. It also supplies low voltage power to the EDS controller and provides an interface for the optional Flush manifold.

The optional Flush manifold provides an alternative means of chemical transfer to the washer extractor. In flush configuration, the EDS is an integrated water flush chemical dispensing system.

Installation time and cost is significantly reduced with the computer based Laundry Program Manager or Formula editor program that allows an off-site technician to create sets of wash programs that are loaded onto the EDS controller via a standard USB stick. (16 GB or smaller). Summary reports can be created in Excel or HTML.

# 2 Installation

## 2.1 General safety information

These installation, operation and servicing instructions shall only be performed by qualified personnel.
The EDS system must be installed in accordance with all applicable electrical and plumbing standards. All washer extractor and dispenser power must be disconnected and the units isolated during installation and/or any time the dispenser is maintained or serviced.

- Always verify all voltage sources with a meter.
- Do not locate the pump-stand under plumbing fittings that could leak.
- Ensure that the installer has enough room to carry and lift the units when installing the EDS system.
- Do not pick up unit by supply cord.
- Wear PPE (Personal Protective Equipment) when dispensing chemicals or other materials or when working in the vicinity of all chemicals, filling or emptying equipment.

- Always observe safety and handling instructions of the chemical manufacturers.
- You must follow all precautions as advised on the product safety data sheet.
- Always direct discharge away from you or other persons or into approved containers.
- Always dispense cleaners and chemicals in accordance with manufacturer's instructions.
- Always exercise caution when maintaining your equipment.
- Always re-assemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
- Keep equipment clean to maintain proper operation.

## 2.2 Symbols

| | |
|---|---|
| ⚠ | Caution |
| 📖 | Read the instructions before using the machine |
| 👓 | Personal Protective Equipment symbol |
| 🧤 | Personal Protective Equipment symbol |
| 🦺 | Personal Protective Equipment symbol |

## 2.3 Requirements

- Verify that there is access to the appropriate power source for the unit.
- If the washer extractor has quick connections no external power source is needed for the pumps.
- The EDS system must not be installed near areas that suffer excess temperature changes, frost or precipitation of any kind.
- Ensure that the units can be mounted in an accessible position above the height of the required discharge location.
- The pump-stand shall be installed within 3 m of the washer extractor and close to product containers and at a convenient height for pump tube servicing, about 1–1.5 m.

  The input tubing from the chemical container to the pump-stand shall not be more than 2 m.

  The tubes must not be twisted and shall hang freely without any sharp bends. Longer tubes requires maintenance more often.
- For installations with Flush manifold, make sure there is free space under the pump-stand for a Flush manifold, water valve, and related plumbing.
- The EDS controller must be mounted securely to a wall or on the washer extractor.

  The EDS controller can be mounted to a horizontal or vertical surface such as a wall or on the side panel on a washer extractor.
- The EDS system must not be used or installed in an ATEX environment.

## 2.4 Installation of the pump-stand

The wall where the pump-stand shall be mounted must support wall anchors and must be flat and perpendicular to the floor.

Use the wall mounting bracket as a template and mark the location of the holes on the wall.

Drill the holes and put in suitable wall anchors. Fasten the wall mounting bracket with the screws. Make sure the wall mounting bracket is in level.

Mount the pump-stand on the wall mounting bracket by pressing it downwards until it is in position.

There are different sizes of pump-stands, from 2 pumps up to 6 pumps. The figure shows a pump-stand with 3 pumps and a bracket used for this.
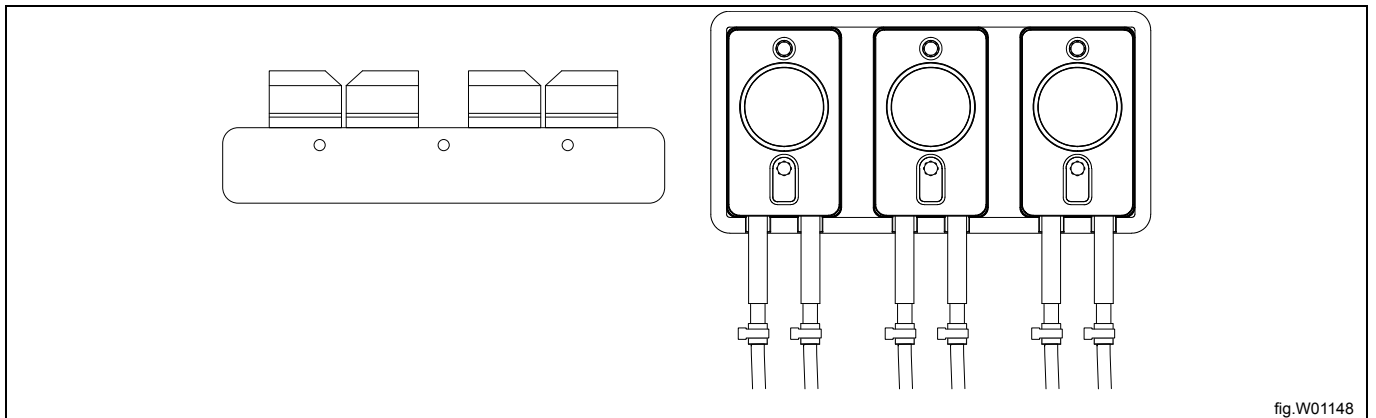


fig.W01148

Connect the cable from the pump-stand to the J1 port on the EDS controller.



fig.8055A
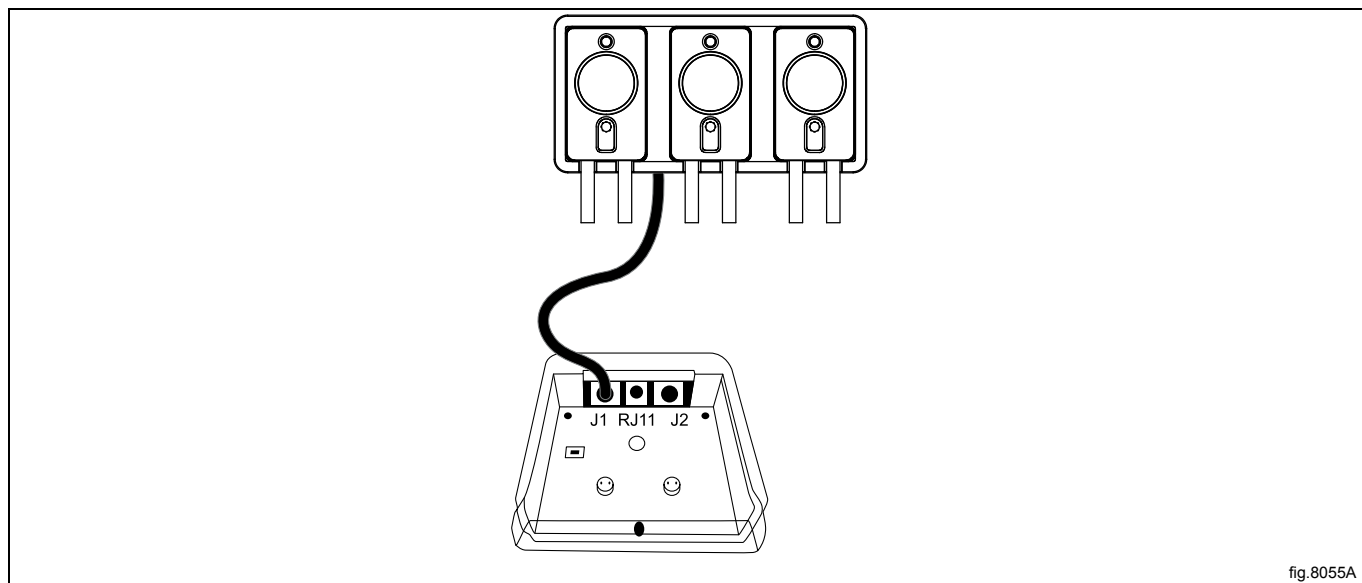
Connect the hoses to the pump-stand.
Connect the hose from the liquid detergent to the left on each pump.
The hose from the pump to the washer extractor is connected to the right on each pump.



fig.8053
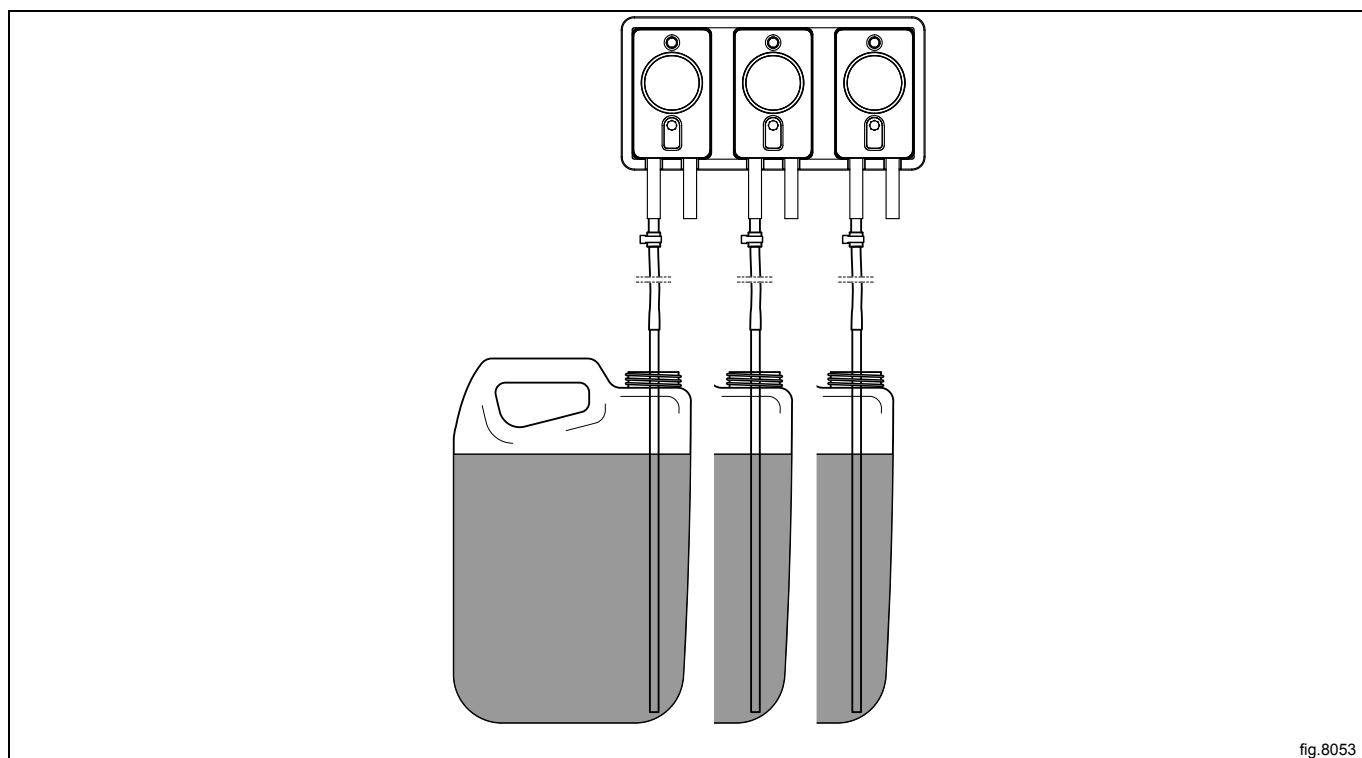
The washer extractor is prepared for connection of external dosing systems or water re-use systems etc.

The connections are closed at delivery. Open the connections (A) that shall be used by drilling a ⌀ 6 mm hole where the hoses shall be connected.

## Note!
**Make sure there is no burrs left after drilling.**

Connect the hose from the right side of the pump to the connection to be used on the washer extractor.
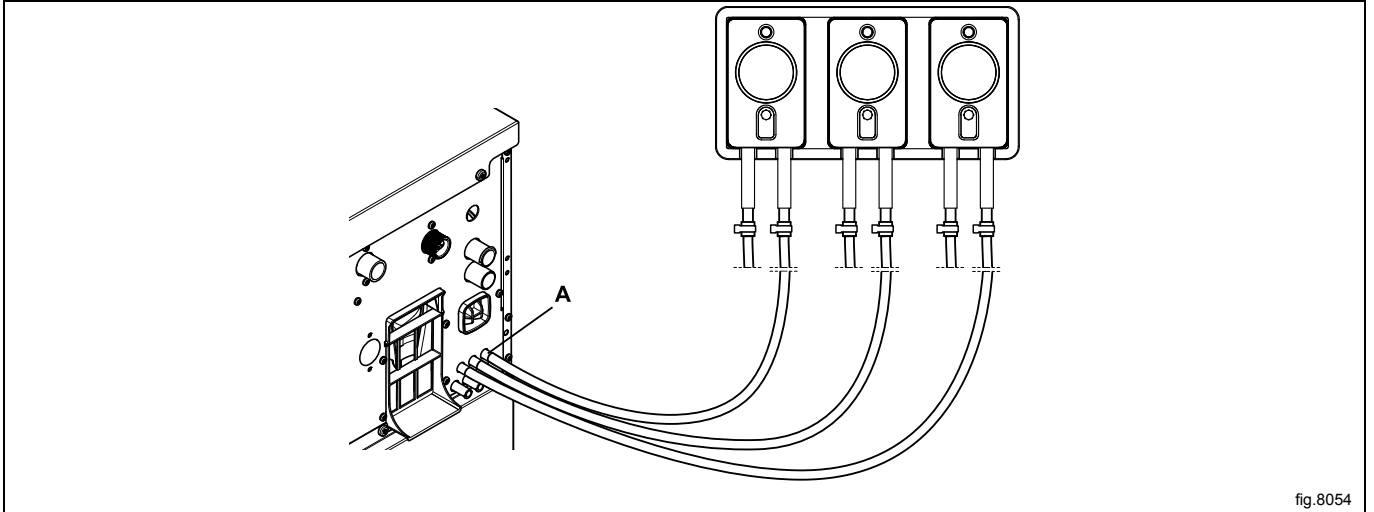


fig.8054

When all hoses has been connected, use cable ties to strap the hoses to the connections to make sure they are tight.

## 2.5 Installation of Flush manifold (option)

The Flush manifold is recommended in locations where the tubes between the pump-stand and the washer extractor is more than 10 m.

It can also be used for safety reasons in installations where dangerous chemicals are used.

The Flush manifold is used to flush the tubes clean when not in use.

Mount the Flush manifold on a suitable location under the pump-stand. The Flush manifold shall be mounted on the wall by the wall hangers (A).
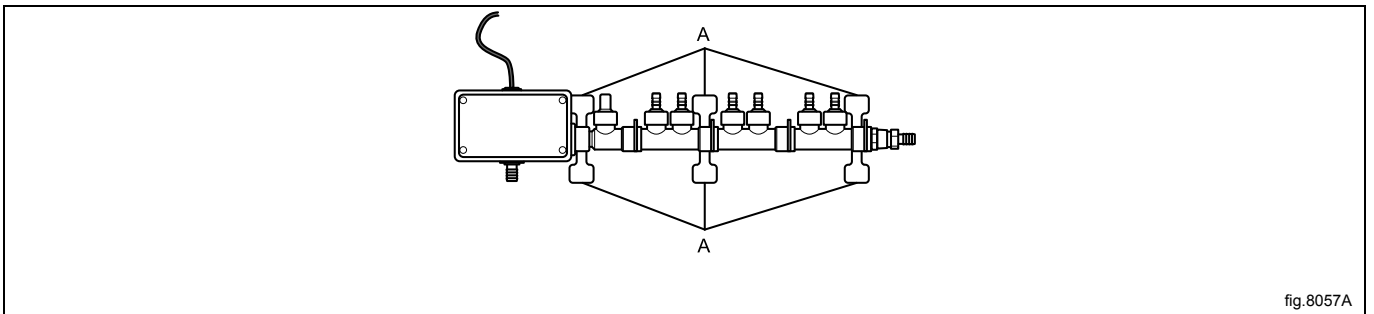


fig.8057A

Connect the outlet tubes to the Flush manifold connections (B).

Connect one tube from the Flush manifold to the washer extractor (C).

Connect the water inlet (D).
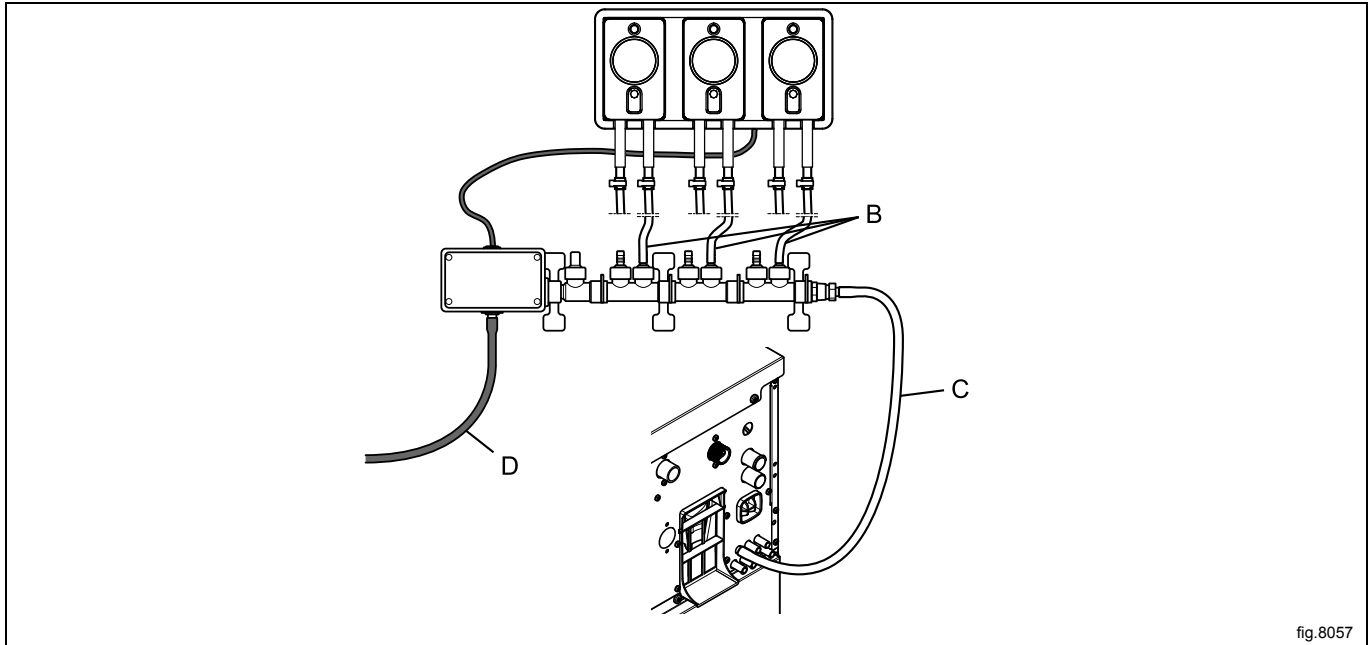
fig.8057

Depress the locking tab (E) and remove the jumper harness (F) from the pump-stand (save the jumper harness for future use if the Flush manifold might be disconnected). Connect the electrical cable from the Flush manifold to the connection on the pump-stand when removed.
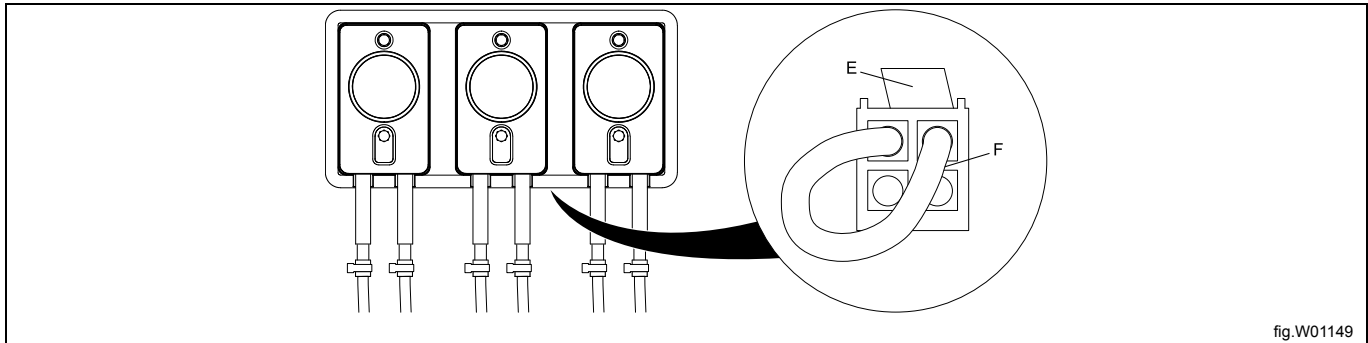
fig.W01149

## 2.6 Installation of the EDS controller

### 2.6.1 General

The EDS controller can be mounted on a wall or on the side panel on a washer extractor.

Connect the cables on the back of the EDS controller. Mount the mounting plate on its location and mount the EDS controller on the mounting plate.

The mounting plate are mounted with the self-adhesive velcro hooks or with the nuts and Allen bolts (enclosed with the kit). The self-adhesive velcro hooks shall be used if the EDS controller is to be mounted on a washer extractor.

## 2.6.2 Installation on Compass Control and Compass Pro

Connect the power supply cable to the machine (A) and the other end of the cable together with the cable from Efficient Dosing in a connection box or with plug and receptacle.

Connect one end of the cable to the EDS controller J2 and the other end to the machine (B).
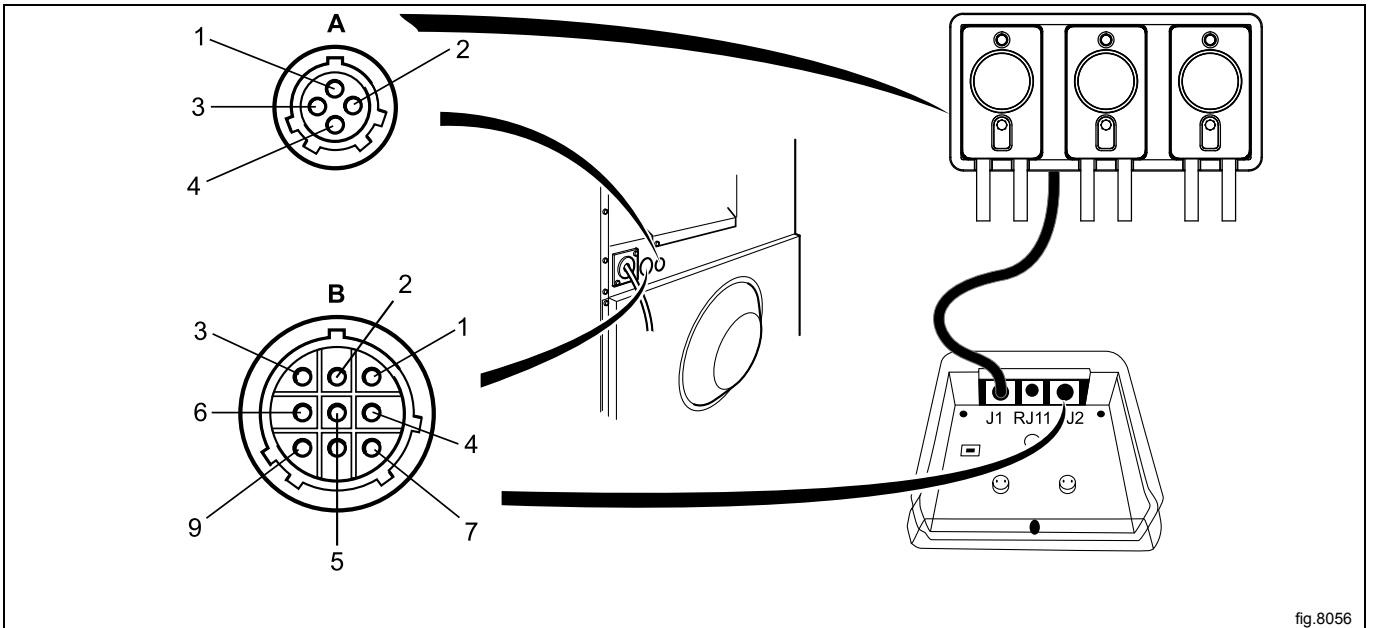


fig.8056

If the machine IS NOT prepared for external dosing systems from factory the cable from the J2 port on the EDS controller shall be connected to the RS232 port on one of the I/O modules in the machine. Follow the instruction for your type of machine.
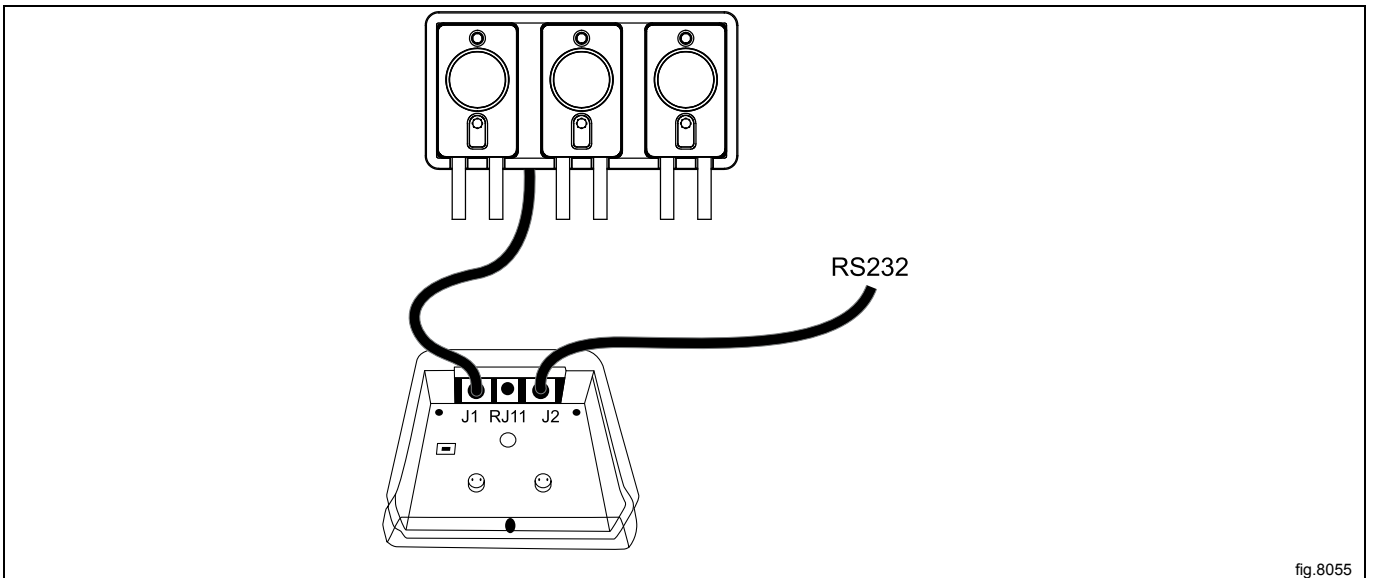


fig.8055

**Connection to I/O module type 2**

Disconnect the power to the machine.

Demount the cover panel at the back of the machine.

Remove one of the covers to the holes on the back of the machine. The location is different on different models.

The cable from the J2 port on the EDS controller shall then be run through the hole (A) and connected to the RS232 port on the I/O module.

Insert the cable and mount with the counter nut and cable gland according to the figure.

fig.W01145

Connect the cable from the J2 port on the EDS controller to the RS232 port on the I/O module.

Strap the cable at suitable positions.
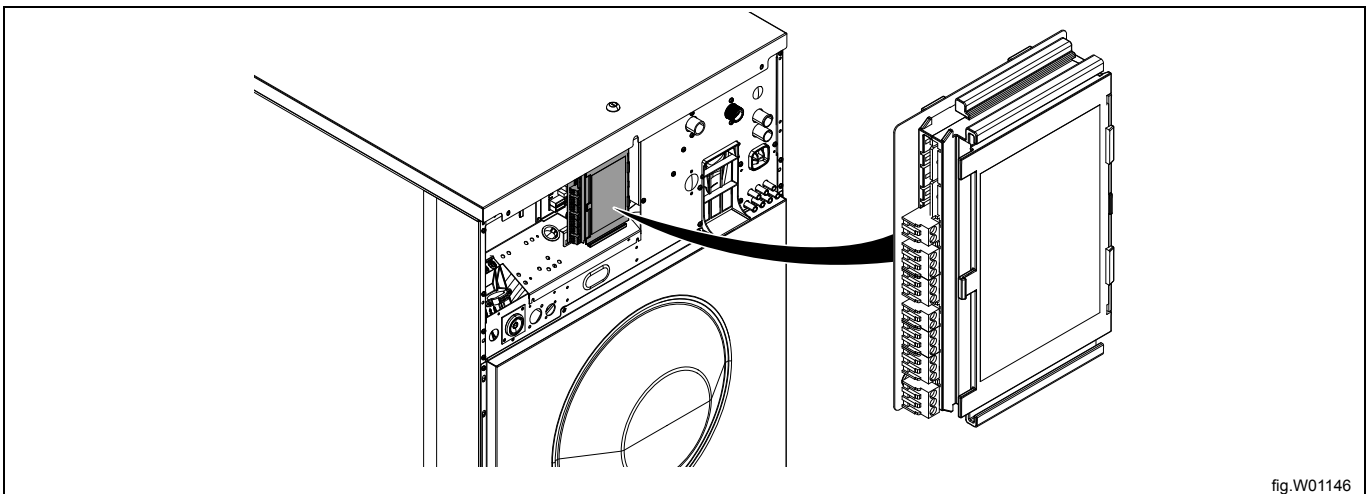


fig.W01146

**Connection to I/O module type 1, 11 or 3**

Disconnect the power to the machine.

Remove one of the covers to the holes on the back of the machine. The location is different on different models.

The cable from the J2 port on the EDS controller shall then be run through the hole (A) and connected to the RS232 port on the I/O module.

Insert the cable and mount with the counter nut and cable gland according to the figure.
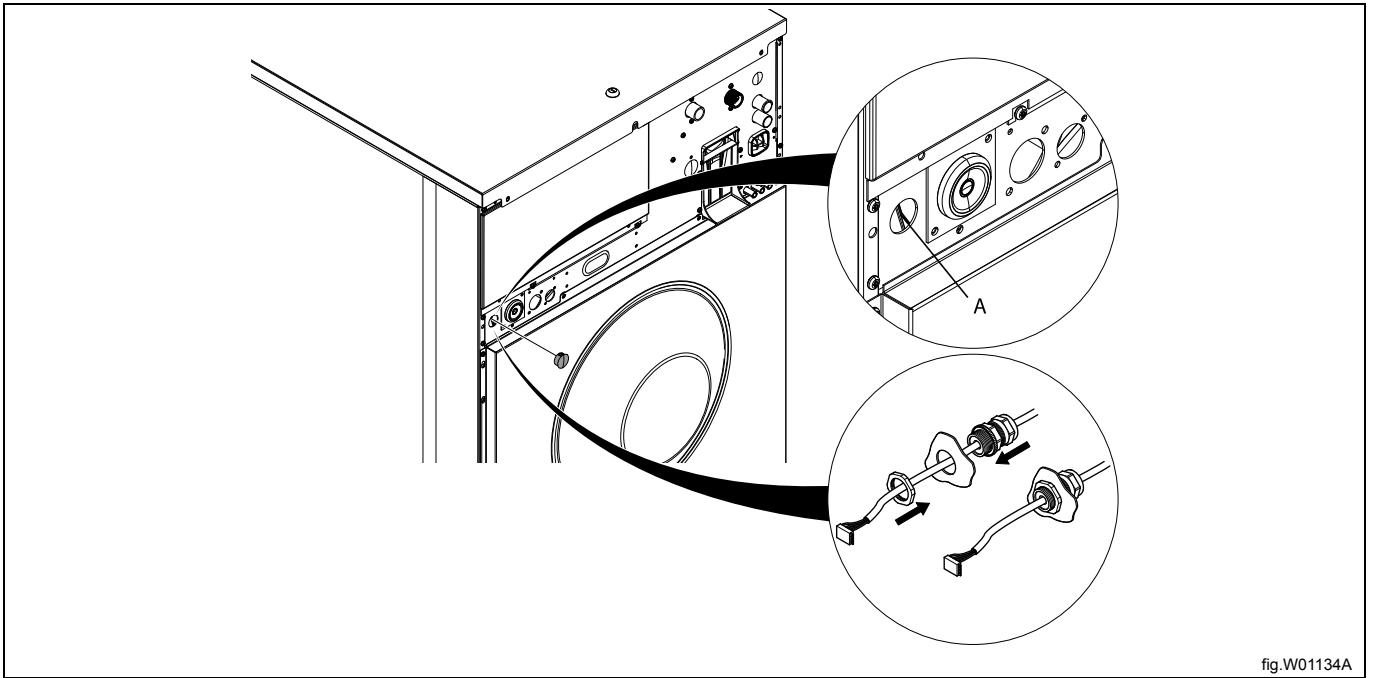
fig.W01134A

Demount the top panel.
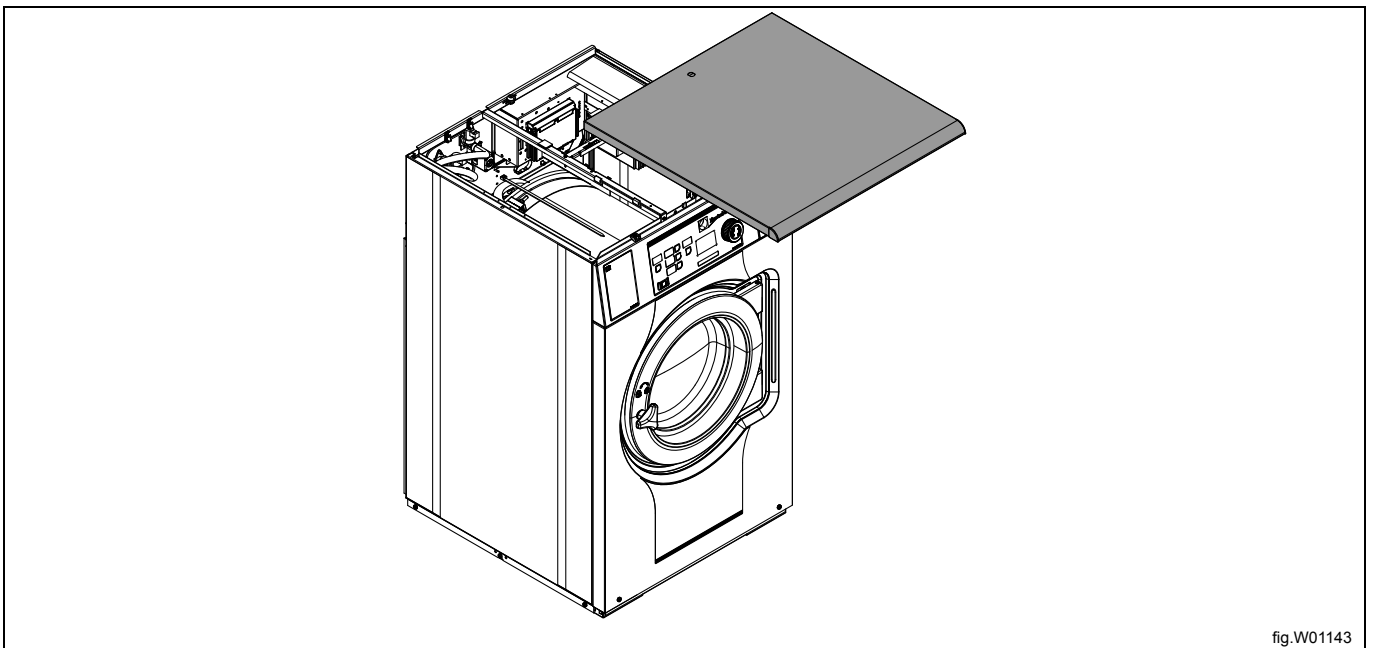


fig.W01143

Connect the cable from the J2 port on the EDS controller to the RS232 port on the I/O module.

The connection is in the bottom of the I/O module. It might be necessary to temporarily demount the I/O module to be able to connect.

Strap the cable at suitable positions. The cable must not be in contact with the drum.

fig.W01142A
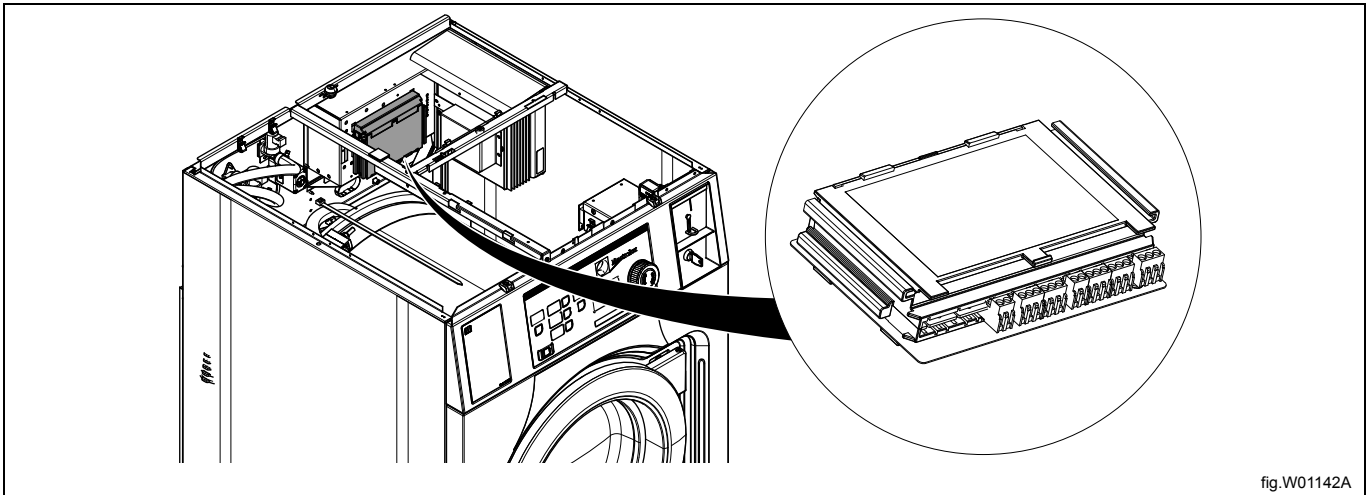
**Connection to the CPU module**

Disconnect the power to the machine.

Remove one of the covers to the holes on the back of the machine. The location is different on different models.

The cable from the J2 port on the EDS controller shall then be run through the hole (A) and connected to the RS232 port on the CPU module at the front of the machine.

Insert the cable and mount with the counter nut and cable gland according to the figure.



fig.W01134A
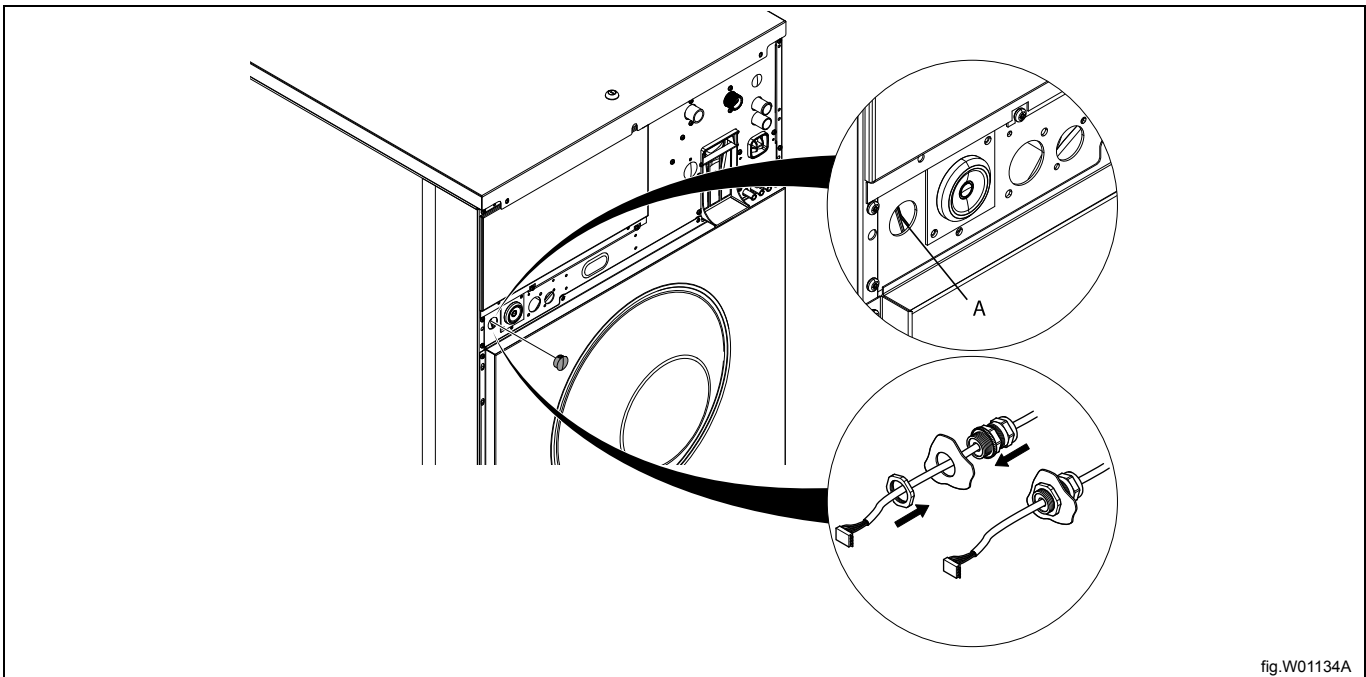
Demount the top panel.
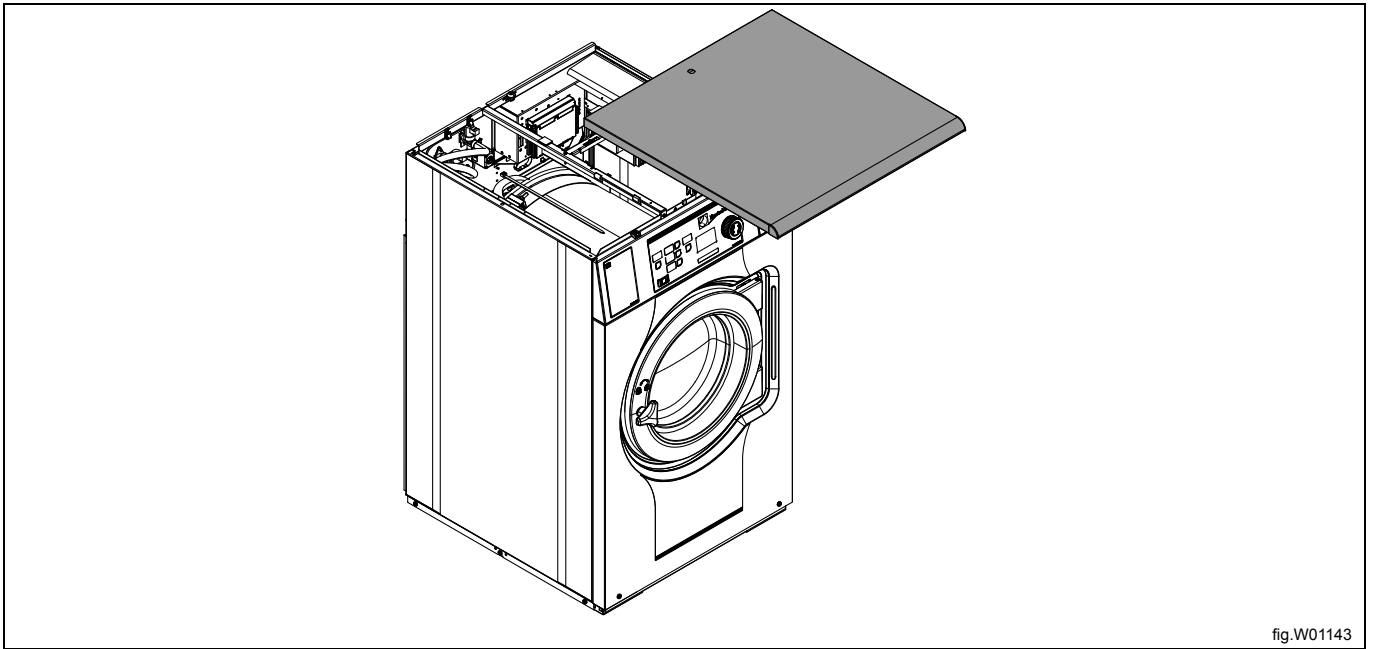
fig.W01143

Demount the cover.

Connect the cable from the J2 port on the EDS controller to the RS232 port on the CPU module.
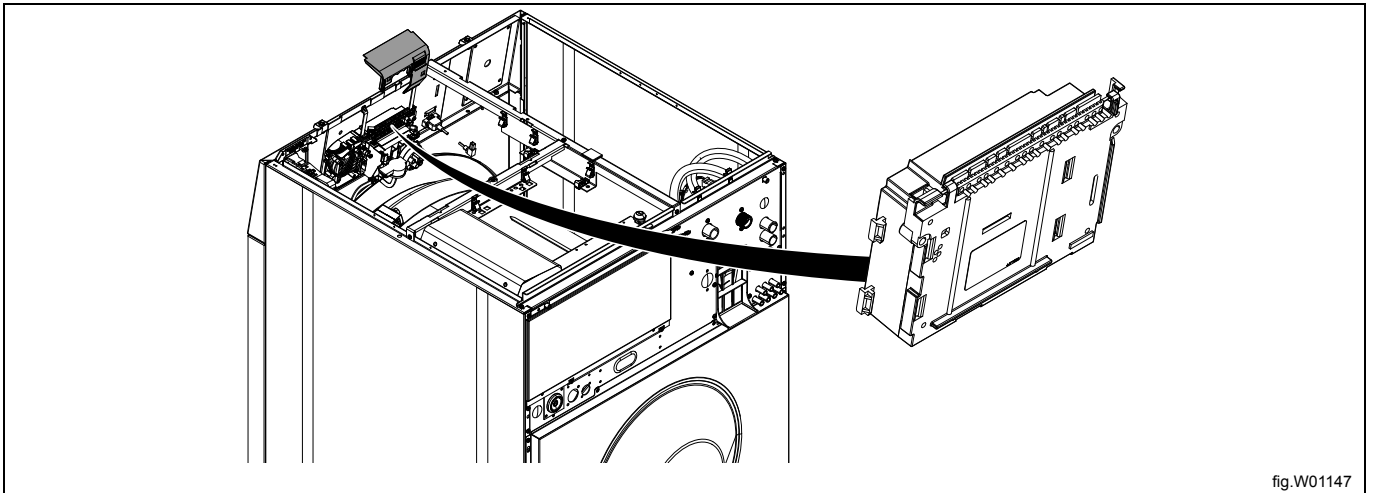


fig.W01147

Strap the cable at suitable positions. The cable must not be in contact with the drum.

## Note!
**If there is no free RS232 port on any of the I/O modules it is necessary to install a new I/O module into the machine. Follow the instructions for this in the Service manual for the specific model.**

## 2.6.3 Installation on Clarus Control

The cable from the RJ11 port on the EDS controller shall be connected to the X10 connection on the CPU card A1

CPU card A1 has different locations depending on machine model.

Follow the instruction for your type of machine.

**W465H/N/S-W4330H/N/S**

Disconnect the power to the machine.

The cable from the RJ11 port on the EDS controller shall be run through a hole at the back of the machine (A) and connected to the X10 connection on the CPU card A1.

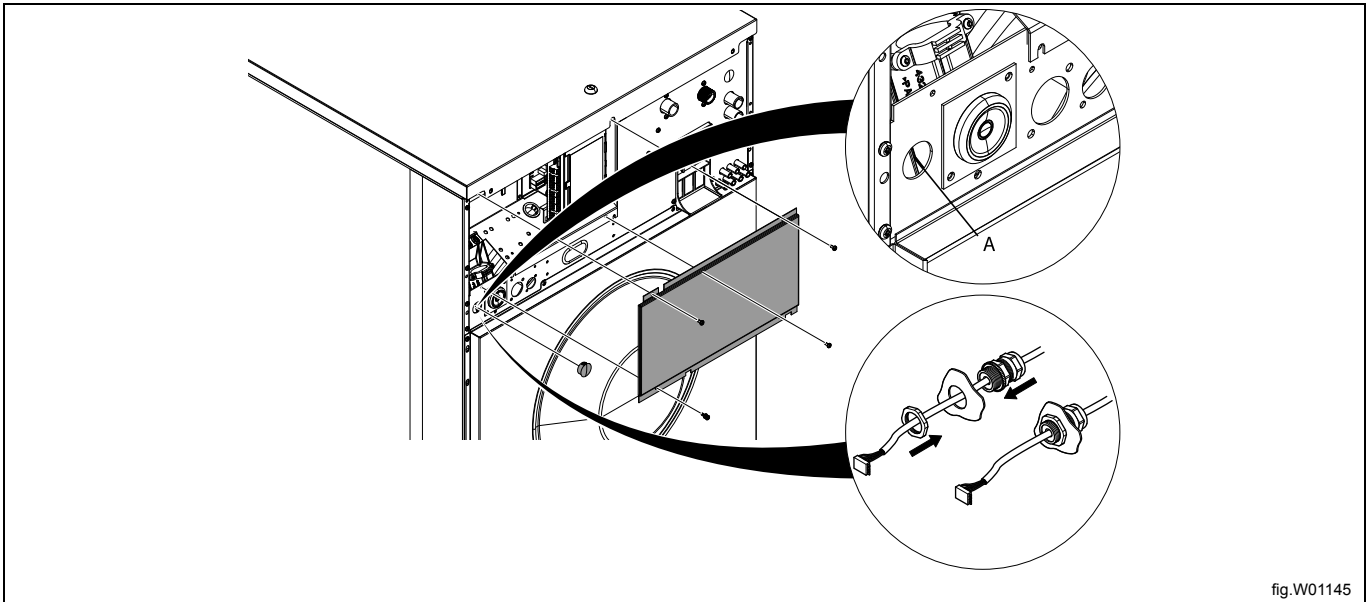Insert the cable and mount with the counter nut and cable gland according to the figure.
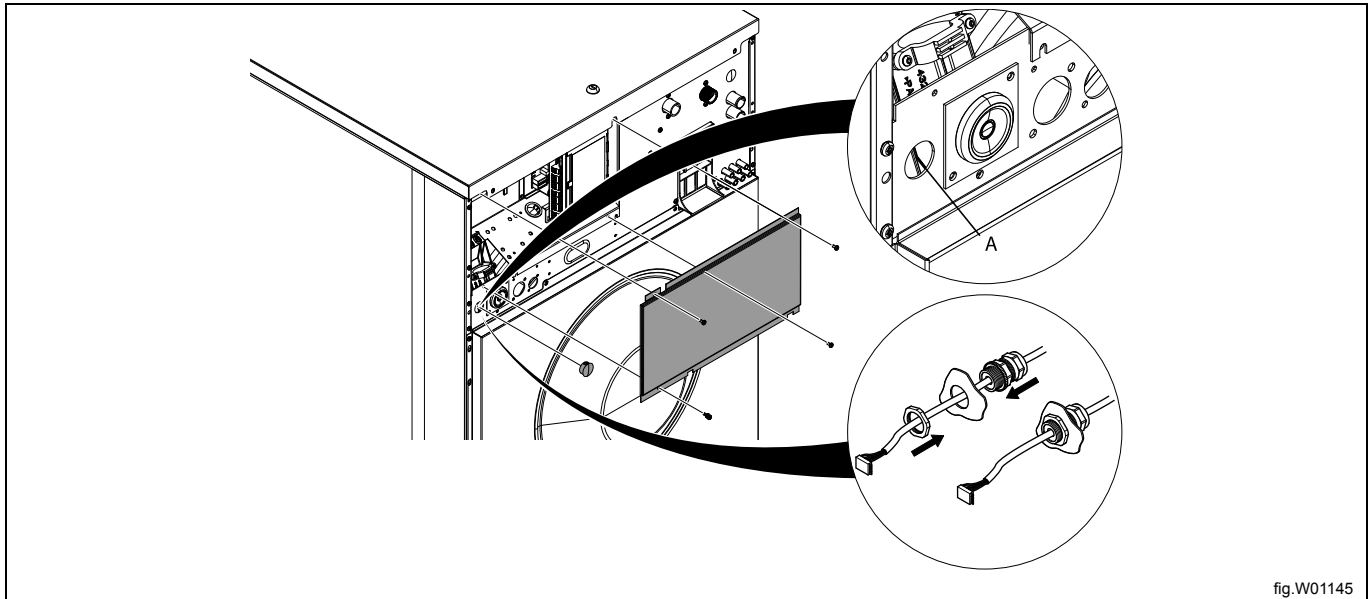


fig.W01145

Demount the top panel and remove the cover over the connection module.

Locate the X10 connection on back right side on the CPU card A1.

Connect the cable from the RJ11 port on the EDS controller to the CPU card A1.

Strap the cable at suitable positions. The cable must not be in contact with the drum.



X10
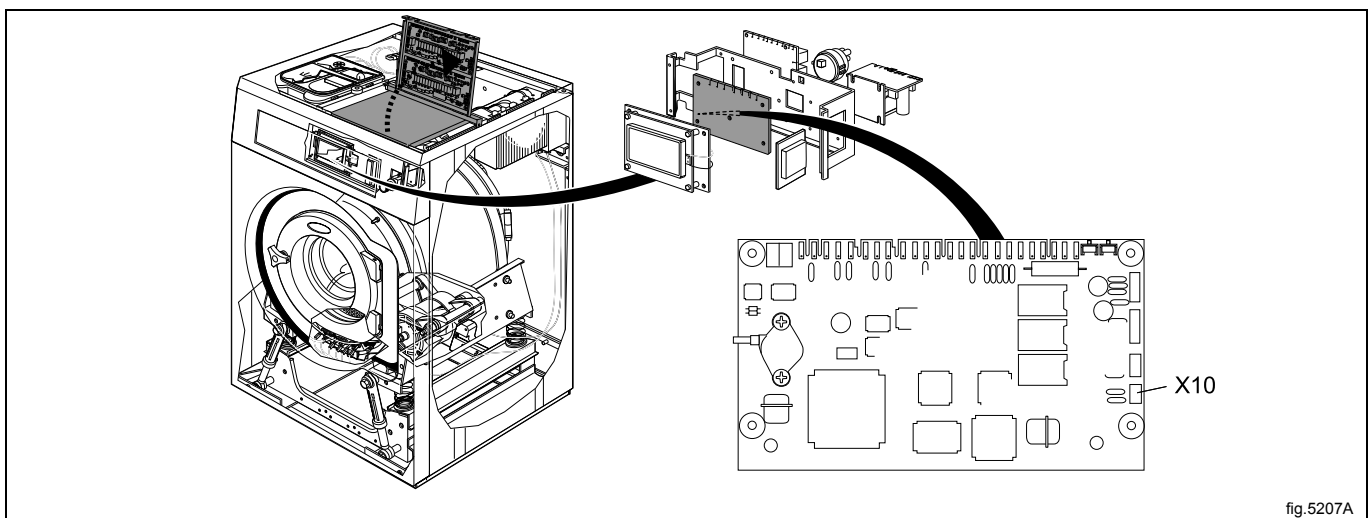
fig.5207A

**W4400H-W41100H**

Disconnect the power to the machine.

Open the electric cabinet on the back of the machine.

Locate the X10 connection on the CPU card A1.

The cable from the RJ11 port on the EDS controller shall be run through a hole at the back of the machine (A) and connected to the X10 connection on the CPU card A1.

Insert the cable and mount with the counter nut and cable gland according to the figure.
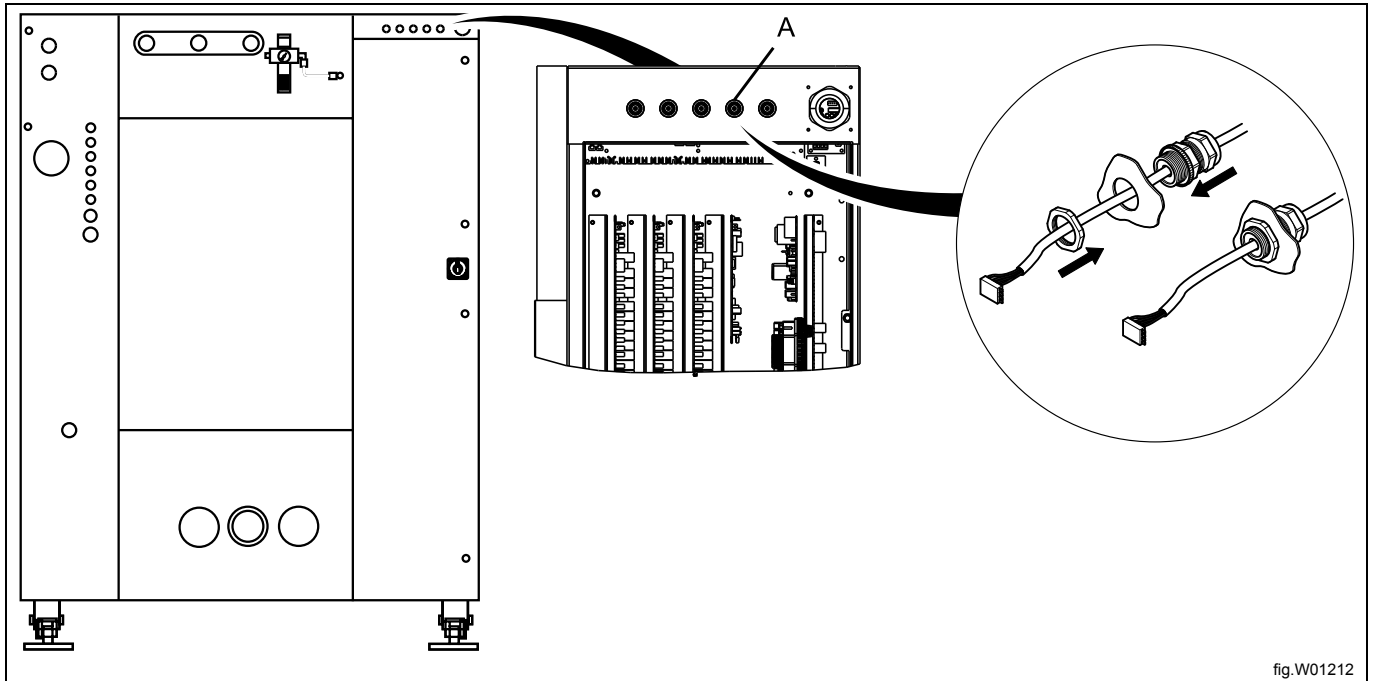


fig.W01212

Connect the cable from the RJ11 port on the EDS controller to the X10 connection on the CPU card A1.

Strap the cable at suitable positions.



X10
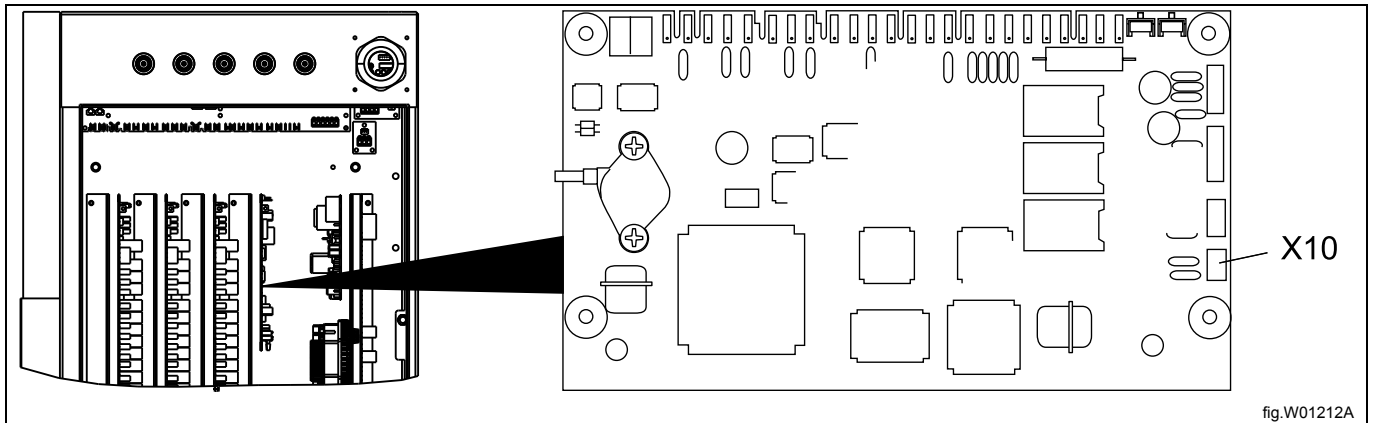
fig.W01212A

On W4400H/W4600H machines with serial number up to –980/1287 and W4850H/W41100H machines with serial number up to –1220/636, the X10 connection is NOT located at the back of the machine but in the front. In this case, the X10 connection shall not be used. Instead, it is necessary to install a DMIS kit (the art. No. for the DMIS kit is 988916197).

Install the DMIS kit according to the instructions enclosed with the kit.

When the DMIS kit has been installed, cut the 3-pole X10 connector and strip the three wires approx. 6 mm (1/4 inch). Connect the wires to the terminal (B) enclosed with the DMIS kit.
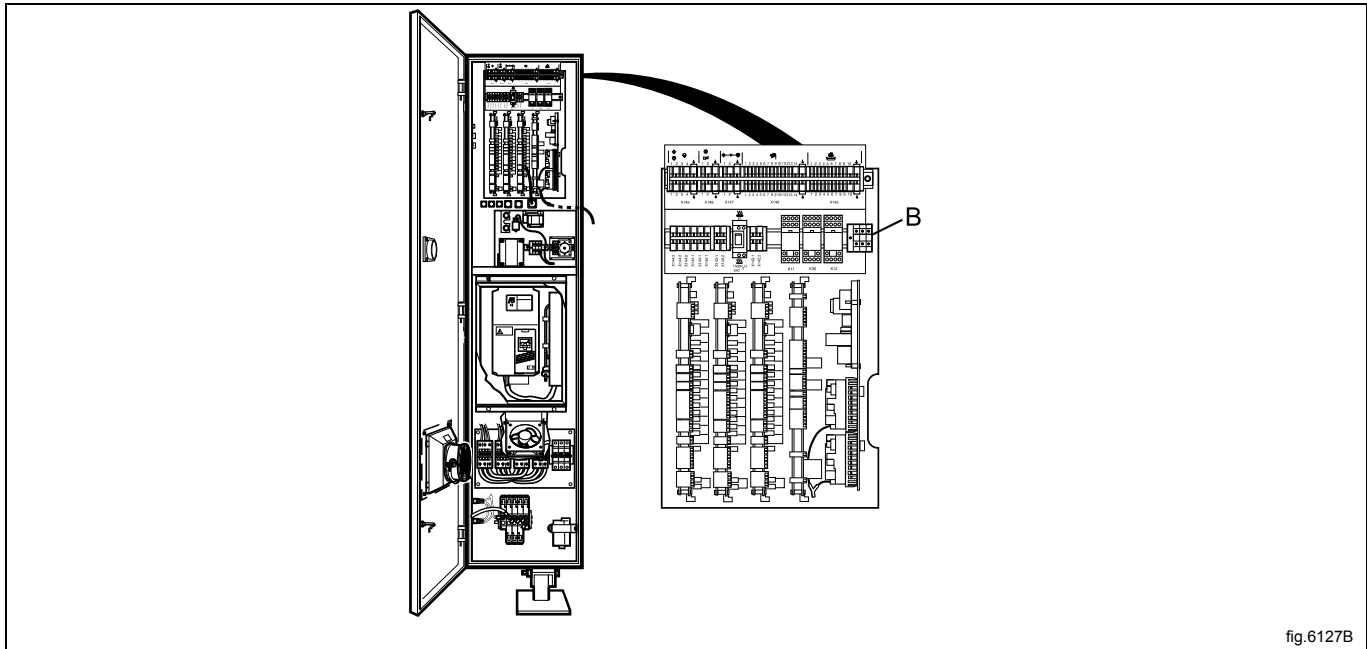
fig.6127B

You can easily check if the machine already has DMIS installed by locating the terminal (B). If terminal (B) is connected; DMIS is installed.

If the machine already has DMIS installed, replace the wires to the terminal (B) with the new. Cut the 3-pole X10 connector and strip the three wires approx. 6 mm (1/4 inch). Connect the wires to the terminal (B) enclosed with the DMIS kit.

## 2.6.4 Dual controller

When more pumps are needed it is possible to connect two EDS controllers to the same washer extractor. This makes it possible to have up to eleven pumps.

Connect one of the EDS controllers to the RS232 port on the I/O module and the other EDS controller to the RS232 port on the CPU module.
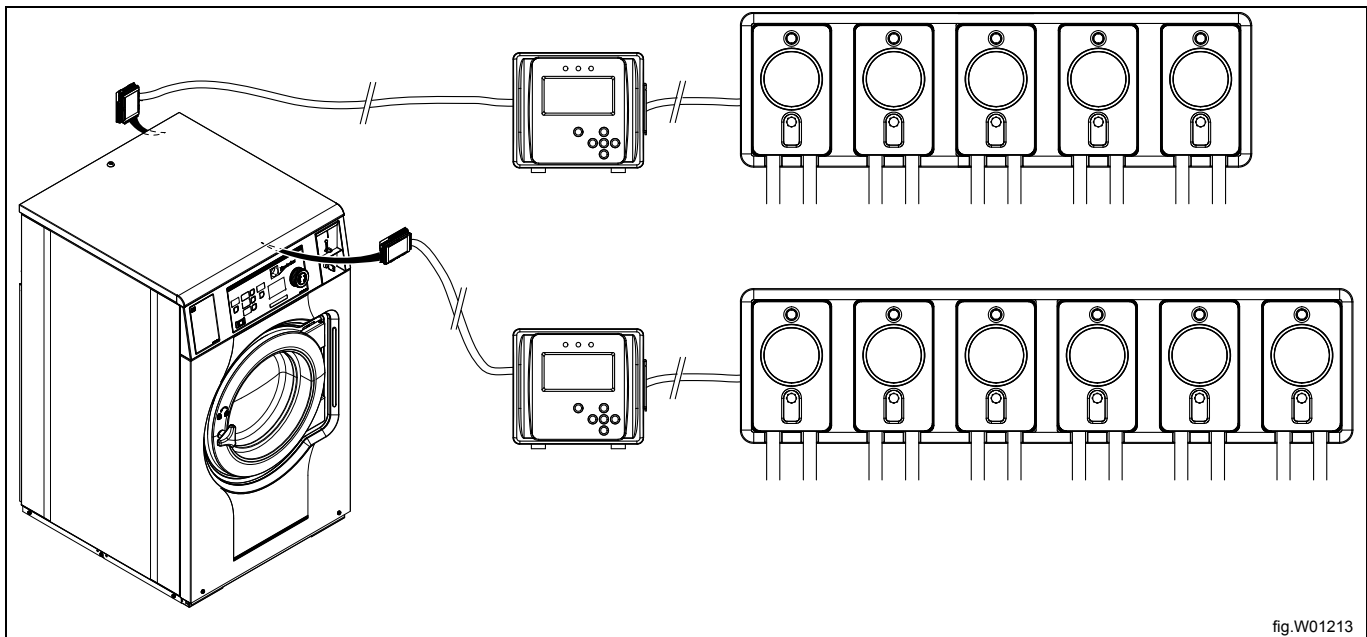


fig.W01213

Which pump stand to be used is set in the INSTALLER MENU.

# 3 Programming

## 3.1 Operating panel

The buttons on the operating panel are used to scroll around in the menu tree.

To activate a menu and to save a setting press Enter.



fig.8058
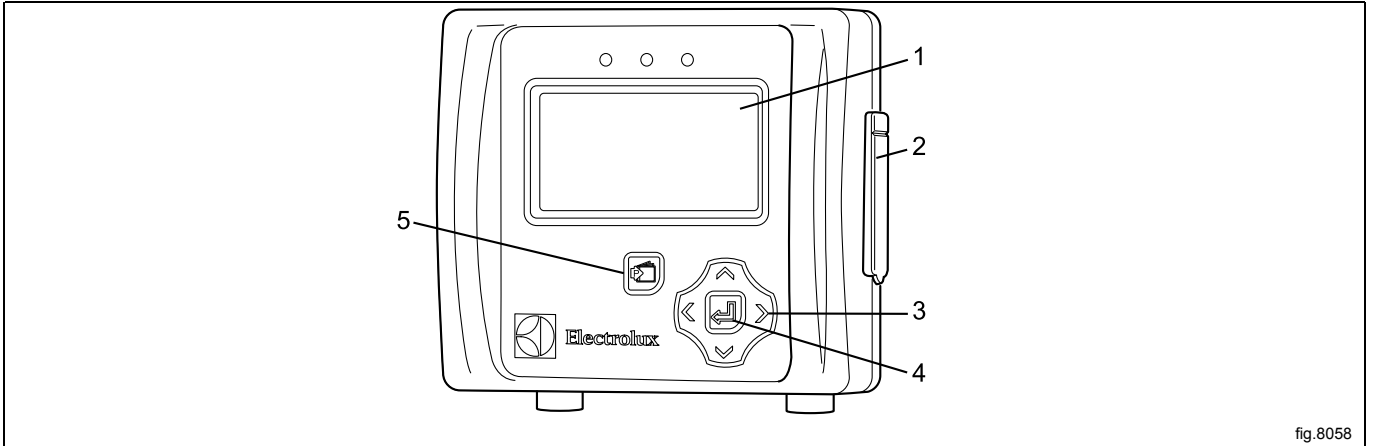
| 1 | Display |
|---|---|
| 2 | Lid to USB connection |
| 3 | Arrows to scroll right, left, down and up |
| 4 | Enter |
| 5 | Enter/Exit the Main menu |

## 3.2 Language settings

The EDS controller is pre-set from factory with English and Spanish languages. Other languages can be downloaded from the ELS website directly to a USB stick (16 GB or smaller).

If changing from one of the pre-set languages, the language-enabled USB stick must be connected **before** powering up the EDS controller.

Insert the language enabled USB stick. Power up the EDS controller, select language and press Enter to save.

## 3.3 Time and date settings

When the language has been set the "Date and time menu" appears automatically on the display.

Set the date and time and press Enter to save.

The date is set as YYYY-MM-DD.

The time is set as HH:MM.

## 3.4 Priming the pumps

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                MAIN MENU
EMERGENCY PUMP STOP
USER PRIME PUMPS
USER MANUAL FLUSH
MANAGER REPORTS
INSTALLER MENU
VIEW EFFICIENCY
```

A password is needed to continue.
The default password is set to 01234.
When the password is set you will enter the INSTALLER MENU.
Activate the INSTALLER SERVICE menu.

```
               INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE
```

Activate the SERVICE PUMPS menu.

```
              INSTALLER SERVICE
 SERVICE PUMPS
 VIEW LOAD COUNT
 VIEW LOAD WEIGHT
 VIEW AMOUNT PUMPED
 CLEAR DATA LOG
```

Activate the PRIME PUMP menu.

```
                SERVICE PUMPS
 PRIME PUMP
 PUMP CALIBRATION
 NAME PUMPS
 ENTER PRODUCT COSTS
 DATE TUBE CHANGED
```

Select pump from the list to and press Enter to start and stop the pump.
The hose shall be filled all the way to the outlet of the hose.

```
               SET PRIME PUMP
 P1
 P2
 P3
 P4
 P5
 P6
```

## 3.5 Calibrating the pumps

Make sure the pumps has been primed before calibrating.
Enter the MAIN MENU and activate the INSTALLER MENU.

```
                 MAIN MENU
 EMERGENCY PUMP STOP
 USER PRIME PUMPS
 USER MANUAL FLUSH
 MANAGER REPORTS
 INSTALLER MENU
 VIEW EFFICIENCY
```

A password is needed to continue.
The default password is set to 01234.
When the password is set you will enter the INSTALLER MENU.
Activate the INSTALLER SERVICE menu.

```
                INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE
```

Activate the SERVICE PUMPS menu.

```
                INSTALLER SERVICE
 SERVICE PUMPS
 VIEW LOAD COUNT
 VIEW LOAD WEIGHT
 VIEW AMOUNT PUMPED
 CLEAR DATA LOG
```

Activate the PUMP CALIBRATION menu.

```
                SERVICE PUMPS
 PRIME PUMP
 PUMP CALIBRATION
 NAME PUMPS
 ENTER PRODUCT COSTS
 DATE TUBE CHANGED
```

Activate the CALIBRATE VOLUME menu.

```
                PUMP CALIBRATION
 VIEW CALIBRATION
 CALIBRATE (TIME)
 CALIBRATE (VOLUME)
```

Place a container with ml markings (minimum volume 300 ml) under the outlet tube of the pump to be calibrated.
Select pump from the list to be calibrated and press Enter to start.

```
                SET PRIME PUMP
 P1
 P2
 P3
 P4
 P5
 P6
```

Press enter to stop at exactly 250 ml.

Repeat the calibration for all of the pumps.
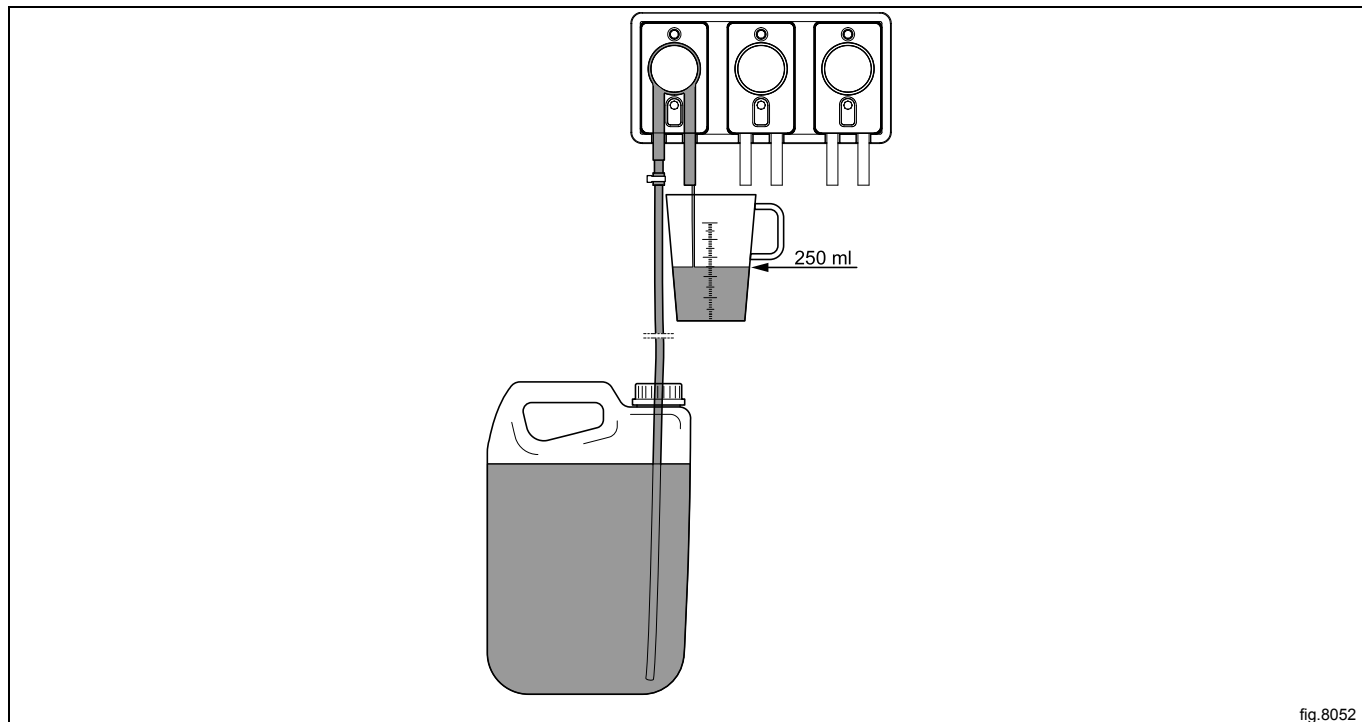


fig.8052

**Note!**
**If the pumps are not calibrated they will not run even if there is an amount programmed.**

**Note!**
**If the calibration time for each pump is longer than 52 seconds for 250 ml (50 seconds for 8 oz.) this indicates that the pump outlet is 25% below rated flow rate. In this case it is recommended to increase the supply tube inlet size to avoid wear out on the tube.**

## 3.6 Basic settings in the EDS controller

In order for the EDS system to work the following basic settings must be made in the EDS controller.

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                   MAIN MENU
EMERGENCY PUMP STOP
USER PRIME PUMPS
USER MANUAL FLUSH
MANAGER REPORTS
 INSTALLER MENU
VIEW EFFICIENCY
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the SET UNITS OF MEASURE menu and select unit.

```
                 INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
 SET UNITS OF MEASURE
ELECTROLUX SETUP
```

Activate the ELECTROLUX SETUP menu.

```
                 INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
SET UNITS OF MEASURE
 ELECTROLUX SETUP
```

In the ELECTROLUX SETUP menu the following sub menus are available.

Activate any of the menus to view or change the parameters.

- ELECTROLUX MACHINE
- ELECTROLUX ADDRESS
- MACHINE WEIGHT
- DUAL CONTROLLER

**ELECTROLUX MACHINE**

Activate the ELECTROLUX MACHINE menu and set the correct control system.

```
                ELECTROLUX TYPE
COMPASS PRO
COMPASS
CLARUS CONTROL
```

**ELECTROLUX ADDRESS**

For a Compass Control/Compass Pro machine the EDS controller's address is pre-set to 000. For a Clarus Control machine the EDS controller's address is pre-set to 001.

Make sure the washer extractor's address is also set to 0 or change the EDS controller's address to match the address in the washer extractor.

Activate the ELECTROLUX ADDRESS menu and set the address.

```
┌─────────────────────────────────────────┐
│         ELECTROLUX ADDR.                 │
├─────────────────────────────────────────┤
│                                          │
│              000/001                     │
│                                          │
│                                          │
│                                          │
└─────────────────────────────────────────┘
```

**Note!**
**The communication between the washer extractor and the EDS controller will not work if the addresses are not the same.**

The communication is verified by the presence of an asterisk (*) in the right corner on the bottom of the display.

```
┌─────────────────────────────────────────┐
│              ELECTROLUX                  │
├─────────────────────────────────────────┤
│ PROG                 S 12345             │
│ STEP                 –                   │
│ TIME                 –                   │
│ WGT                  –                   │
│ TEMP                 –                   │
│ EFF                                      │
│                                    *     │
└─────────────────────────────────────────┘
```

**MACHINE WEIGHT**

Activate the MACHINE WEIGHT menu and set the capacity weight for the washer extractor. The capacity weight is found on the label on the back of the machine.

```
┌─────────────────────────────────────────┐
│            MACHINE WEIGHT                │
├─────────────────────────────────────────┤
│                                          │
│               000                        │
│                                          │
│                                          │
│                                          │
└─────────────────────────────────────────┘
```

**DUAL CONTROLLER**

This menu is only valid if you have two EDS Controllers and two pump stands connected to one machine.

Activate the DUAL CONTROLLER menu.

Select controller 1 or 2 or turn the function off.

```
┌─────────────────────────────────────────┐
│            DUAL CONTROLLER               │
├─────────────────────────────────────────┤
│ OFF                                      │
│ CONTROLLER 1                             │
│ CONTROLLER 2                             │
│                                          │
│                                          │
│                                          │
└─────────────────────────────────────────┘
```

**Change the address on the washer extractor**

If the machine address needs to be changed on the washer extractor, proceed as follows:

• Activate Service mode in the machine.
• Activate the CONFIGURATION menu.

```
              SERVICE MENU
 FUNCTION TEST
 CONFIGURATION
 PRICE PROGRAMMING
 STATISTICS
 PROGRAM PARAMETERS
 SYSTEM
 DEFAULT LANGUAGE
```

• Activate the MACHINE ADDRESS menu and set the machine address.

## 3.7 Wash program set up

In the PROGRAM FORMULA menu it is possible to create, edit and save wash programs.

• Up to 50 EDS controller wash programs may be created within the EDS controller.
• Each EDS controller wash program can be assigned to all six of the multiple Electrolux wash programs available in the machine.
• If utilised correctly the EDS controller can be utilisied for up to 300 Electrolux wash programs.

**Required software**

The programming and set up are made with **Laundry Program Manager** or **Formula Editor Program**.

• For Laundry Program Manager the software is distributed as 2 kits. One kit is for Compass Pro and Compass Control and one kit is for Clarus Control. Instructions for programming with Laundry Program Manager is enclosed with the kit.
• For Formula Editor Program the software is downloaded to a Windows based PC from the manufacturers web page. The formula/wash program is when ready saved to a .SUP-file that is loaded to the EDS controller via a USB stick.
  Download the Formula Editor Program: http://hydrosystemseurope.com/support/downloads/

**Upload wash programs to the EDS controller**

Enter the MAIN MENU and activate the INSTALLER MENU.

```
               MAIN MENU
 EMERGENCY PUMP STOP
 USER PRIME PUMPS
 USER MANUAL FLUSH
 MANAGER REPORTS
 INSTALLER MENU
 VIEW EFFICIENCY
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the DATA TRANSFER menu.

```
             INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE
```

Insert the USB stick with the downloaded wash programs in the EDS controller.

Activate the `READ SETUP` menu.

```
              DATA TRANSFER
 WRITE REPORTS
 READ SETUP
 WRITE SETUP
 UPDATE FIRMWARE
 WRITE ACTIVITY LOG

```

Activate the setup file from the list. Before uploading there will be a warning message on the display. Press Enter to upload the selected setup file.

```
               SETUP FILE
 XXXXX
 XXXXX
 XXXXX
 XXXXX
 XXXXX

```

**Download wash programs from the EDS controller to a USB stick**

Enter the `MAIN MENU` and activate the `INSTALLER MENU`.

```
                MAIN MENU
 EMERGENCY PUMP STOP
 USER PRIME PUMPS
 USER MANUAL FLUSH
 MANAGER REPORTS
 INSTALLER MENU
 VIEW EFFICIENCY

```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `DATA TRANSFER` menu.

```
              INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM ID CATEGORY
 DATA TRANSFER
 SET UNITS OF MEASURE

```

Insert the USB stick in the EDS controller.

Activate the `WRITE SETUP` menu.

```
              DATA TRANSFER
 WRITE REPORTS
 READ SETUP
 WRITE SETUP
 UPDATE FIRMWARE
 WRITE ACTIVITY LOG

```

Use the keypad and write a file name for the file.

Before downloading there will be a warning message on the display. Press Enter to download the selected setup file to the USB stick.

The USB stick can now be used to upload the wash program to multiple machines.

## 3.8 Download reports to a USB stick

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                  MAIN MENU
 EMERGENCY PUMP STOP
 USER PRIME PUMPS
 USER MANUAL FLUSH
 MANAGER REPORTS
  INSTALLER MENU
 VIEW EFFICIENCY
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the DATA TRANSFER menu.

```
                INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE
```

Insert the USB stick in the EDS controller.

Activate the WRITE REPORTS menu.

```
                DATA TRANSFER
 WRITE REPORTS
 READ SETUP
 WRITE SETUP
 UPDATE FIRMWARE
 WRITE ACTIVITY LOG
```

Set the current date for the report and press Enter.

Use the keypad and write a name for the report and press Enter to save to the USB stick.

### Reset the data log

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                  MAIN MENU
 EMERGENCY PUMP STOP
 USER PRIME PUMPS
 USER MANUAL FLUSH
 MANAGER REPORTS
  INSTALLER MENU
 VIEW EFFICIENCY
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the INSTALLER SERVICE menu.

```
                 INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
SET UNITS OF MEASURE

```

Activate the CLEAR DATA LOG menu.

```
                 INSTALLER SERVICE
SERVICE PUMPS
VIEW SINK COUNT
VIEW SINK VOLUME
VIEW AMOUNT PUMPED
CLEAR DATA LOG

```

Before resetting the data log there will be a warning message on the display. Press Enter. Set the current date and press Enter to reset the data log.

**Note!**
**Resetting the data log will not affect the main program settings.**

## 3.9 Electrolux wash program allocation

Enter the MAIN MENU and activate the INSTALLER MENU.

```
                 MAIN MENU
EMERGENCY PUMP STOP
USER PRIME PUMPS
USER MANUAL FLUSH
MANAGER REPORTS
INSTALLER MENU
VIEW EFFICIENCY
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the INSTALLER MENU.

Activate the PROGRAM FORMULAS menu.

```
                 INSTALLER MENU
INSTALLER SERVICE
INITIAL SYSTEM SETUP
PROGRAM FORMULAS
DATA TRANSFER
SET UNITS OF MEASURE

```

Select formula/wash program from the list and press Enter.
The example below shows `F01 HYDRO ECO`.

```
                    PROGRAM FORMULAS
F01 HYDRO ECO
F02 COLORS
F03 LIGHT SOIL
F04 GENERAL WASH
F05 ECO COLD
F06 SHORT
```

Activate the `PROGRAM SELECT` menu.

```
                     F01 HYDRO ECO
PUMP SETTINGS
SET COUNT PUMP
EDIT NAME
PROGRAM SELECT
CLEAR FORMULA
```

Select formula/wash program from the list and press Enter.
The example below shows `E1`.

```
                   F01 PROGRAM LIST
E1 016
E2
E3
E4
E5
E6
```

Assign the selected formula/wash program to the machine's Electrolux wash program.
This formula/wash program can be assigned to 6 different Electrolux wash programs.

```
                     E1 PROGRAM

E3
E4
E5
E6
```

## 3.10 Selection of operation mode

There are two different operation modes, Standard mapping and Euro mapping.

Enter the `MAIN MENU` and activate the `INSTALLER MENU`.

```
                       MAIN MENU
EMERGENCY PUMP STOP
USER PRIME PUMPS
USER MANUAL FLUSH
MANAGER REPORTS
INSTALLER MENU
VIEW EFFICIENCY
```

A password is needed to continue.

The default password is set to 01234.

When the password is set you will enter the `INSTALLER MENU`.

Activate the `INITIAL SYSTEM SETUP` menu.

```
               INSTALLER MENU
 INSTALLER SERVICE
 INITIAL SYSTEM SETUP
 PROGRAM FORMULAS
 DATA TRANSFER
 SET UNITS OF MEASURE

```

Activate the `SET PUMP MAPS` menu.

```
                SYSTEM SETUP
 EDIT INST PASSWORD
 EDIT MGR PASSWORD
 SET PUMP MAPS
 EDIT ACCOUNT NAME
 EDIT MACHINE NAME

```

Select operation mode and press enter.

```
               OPERATION MODE
 STANDARD MAPPING
 EURO MAPPING




```

**Standard mapping**

In standard mapping there are 5 available washer signals/programs. Each signal is capable of running upp to 3 pumps and each pump is capable of dispensing up to 3 different amounts; A, B and C. Each pump can be allocated to more than one washer signal.

The first time a pump receives a signal it will dispense the "A-amount". The second time a pump receives a signal it will dispense the "B-amount". The third and subsequent time it will dispense the "C-amount".

```
                 PUMP MAPS
 WASHER SIGNAL 1
 WASHER SIGNAL 2
 WASHER SIGNAL 3
 WASHER SIGNAL 4
 WASHER SIGNAL 5

```

**Euro mapping**

Euro mapping shall only be used on machines with quick selection buttons or when rapid advance is used.

In Euro mapping there are 6 available washer signals/programs:

- Pre-wash
- Main wash
- Final rinse
- Spare 1
- Spare 2
- Spare 3

Each signal/program is capable of running up to 3 pumps.

Pumps allocated to Pre-wash will dispense the "A-amount" only. Pumps allocated to Main wash will dispense the "B-amount" only. Pumps allocated to Final rinse, Spare 1, Spare 2 and Spare 3 will dispense the "C-amount" only.

```
                    PUMP MAPS
PRE WASH
MAIN WASH
FINAL RINSE
SPARE 1
SPARE 2
SPARE 3
```

# 4 Test run

Test run the system when the installation completed.

Select a wash program, start the washer extractor and observe a test load to ensure that all products dispense only when they are supposed to dispense.

# 5 Technical specification

- Number of pumps which may run at one time:
  Non flush = All
  Flush manifold = 1 at a time (pumps will queue when more than one is triggered at the same time)
- Maximum pump amount = 995 ml
- Maximum pump delay Time = 999 sec.
- Maximum flush time = 999 sec.
- Maximum pump prime time = 5 min.
- Load count pump = Highest pump number in each wash program with a non-zero amount programmed
- Maximum J1 cable length = 22.8 m
- Maximum operating temperature = 49°C

This unit complies with the following directives:

- 2006/95/EC Low Voltage Directive (LVD)
- 2004/108/EC Electromagnetic Compatibility (EMC)

This unit has been designed and manufactured to the following specifications:

EN 60370-1, EN 61000-6-2:, EN 61000-6-4:2001, EN 61000-3-2:2000, EN 61000-3-3:1995/A1:2001

# 6 Trouble shooting and service

⚠️      ⚠️

Trouble shooting may only be carried out by qualified service personnel.
Disconnect the power and the water before carrying out any maintenance or cleaning on the units.
Do not adjust/rework items not listed in this trouble shooting without guidance from Electrolux service personnel.
If the supply cord is damaged it must be replaced, NOT repaired.

**Circuit breaker**

The pump-stand has a resettable circuit breaker next to the power cable on the pump-stand.

If the pump-stand stops working, check the circuit breaker and push to reset.

**No product on signal**

When trouble shooting for no product on signal:

• Confirm that calibration has been made correctly.
• Confirm that wash program amounts are correctly programmed in the EDS controller.

**J1 and RS232 cable**

Ensure that all cables are clean and corrosion free. Ensure there are no cuts or kinks which can indicate broken wires. Always replace, NOT repair, damaged cables.

**Flush manifold**

When Flush manifold is used, water flow is sensed whenever the EDS controller calls for water flush. If no water flow is sensed, or water flow falls below 2.5 l/min, all pumps will shut down. This provides a safety interlock in the event of low water flow or other water flush system failures.

When connecting the Flush manifold the jumper harness is removed from the pump-stand and replaced with the Flush manifold power cable.

Note that the pumps will not work at all if either the flush jumper harness or the Flush manifold power cable is connected.

**Trouble shooting**

| Symptom | Observation | Cause | Solution |
|---|---|---|---|
| EDS controller display is not working | 1. No power to unit | 1. No power at source | 1. Reset the power to the EDS controller |
| | 2. No power to PI PCB | 2. Tripped or defective circuit breaker | 2. Reset or replace circuit breaker |
| | 3. Power OK, display is still not working | 3. Defective PI PCB, J1/RJ11 cable or EDS controller | 3. Change the components one at a time |
| No pumps run on prime or on signal | 1. Check flush connector | 1. No contact closure at flush connector | 1. Reconnect flush jumper or troubleshoot flush system flow switch if flush system is used |
| | 2. Check J1/RJ11 cable connections | 2. Damaged J1/RJ11 cable | 2. Replace J1/RJ11 cable |
| | | 3. Defective PI PCB, J1/RJ11 cable or EDS controller | 3. Change the components one at a time |
| Some pumps do not run on prime or on signal | 1. Check motor wire connections | 1. Loose motor wire connection | 1. Reconnect loose motor wire connection |
| | 2. Check J1/RJ11 cable connections | 2. Damaged J1/RJ11 cable | 2. Replace J1/RJ11 cable |
| | | 3. Defective PI PCB, J1/RJ11 cable or EDS controller | 3. Change the components one at a time |
| One or more pumps do not run on signal but all pumps prime OK | 1. Confirm pump calibration | 1. Pumps not calibrated | 1. Calibrate pumps |
| | 2. Confirm supply signal is reaching the controller | 2. Washer extractor not sending signal or RS232/X10 wire loose | 2. Repair washer extractor, reprogram washer extractor, reconnect signal wires |
| | 3. If pump interlock is on, is this the first signal set for this pump? | 3. Pump interlock only allows dispenser to recognize first signal for each pump in a load | 3. Reset the power to the EDS controller |
| | 4. Check data cable connections | 4. Damaged data cable | 4. Replace data cable |
| | | 5. Defective EDS controller | 5. Replace the EDS controller |

## Pump-stand disassembly

Disconnect the power to the unit.

Before disconnecting, make note of all connections.

Remove the front of each pump by removing two captive thumbscrews per pump front. Remove the pump tubes. Remove the pump spinners.

Remove the cabinet of the pump-stand by removing four Phillips head screws, one at each corner and two at the bottom of the pump tube.

Remove the Pump Interface (PI) printed circuit board (C) by sliding it out. Remove 2 Molex type wiring connectors by depressing the locking tabs.

Remove the power wiring (B) by loosening the power terminal screws.

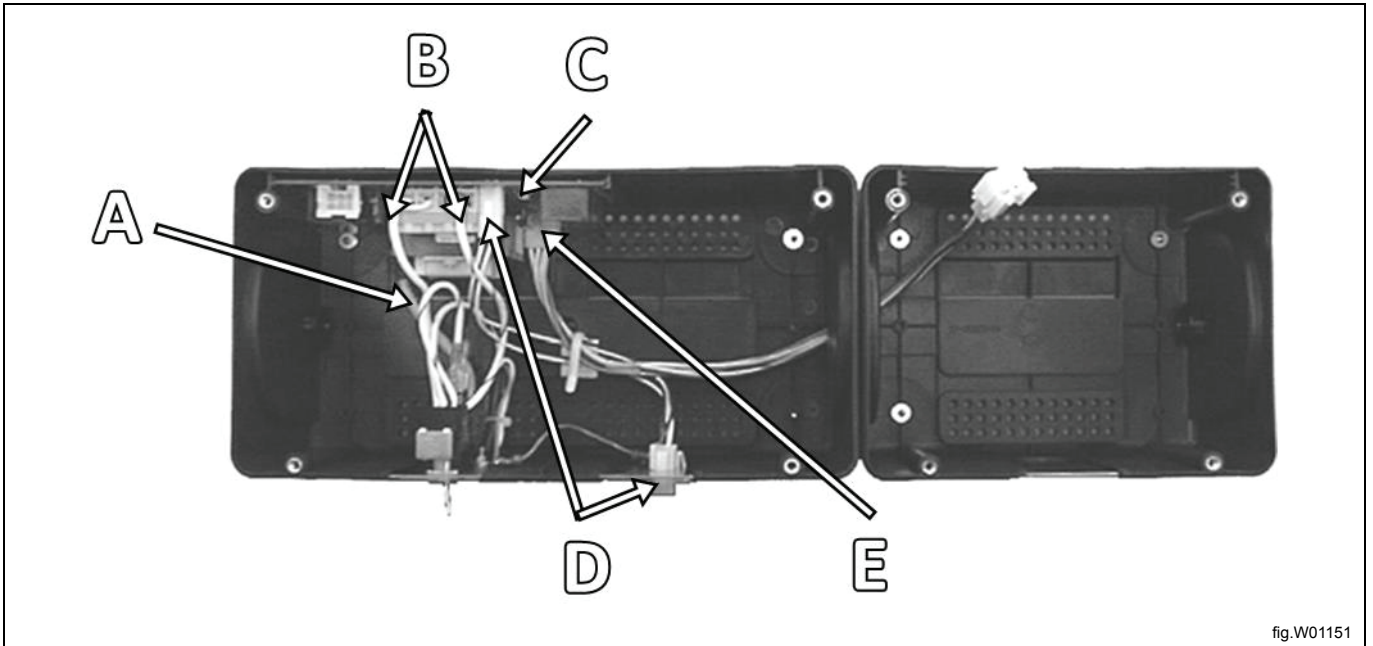Remove the J1 cable (A) by depressing the locking tab.



fig.W01151

## Replacement of pump motor

Disconnect the power to the unit.

Leave the wires connected to the Molex plug and splice new motor wires in when replacing a motor.

Pump motors are secured to the cabinet front by four Phillips head screws. To add a new motor (add a pump to an empty pump location), plug the motor wires into the appropriate locations in the Molex motor plug for that pump position.
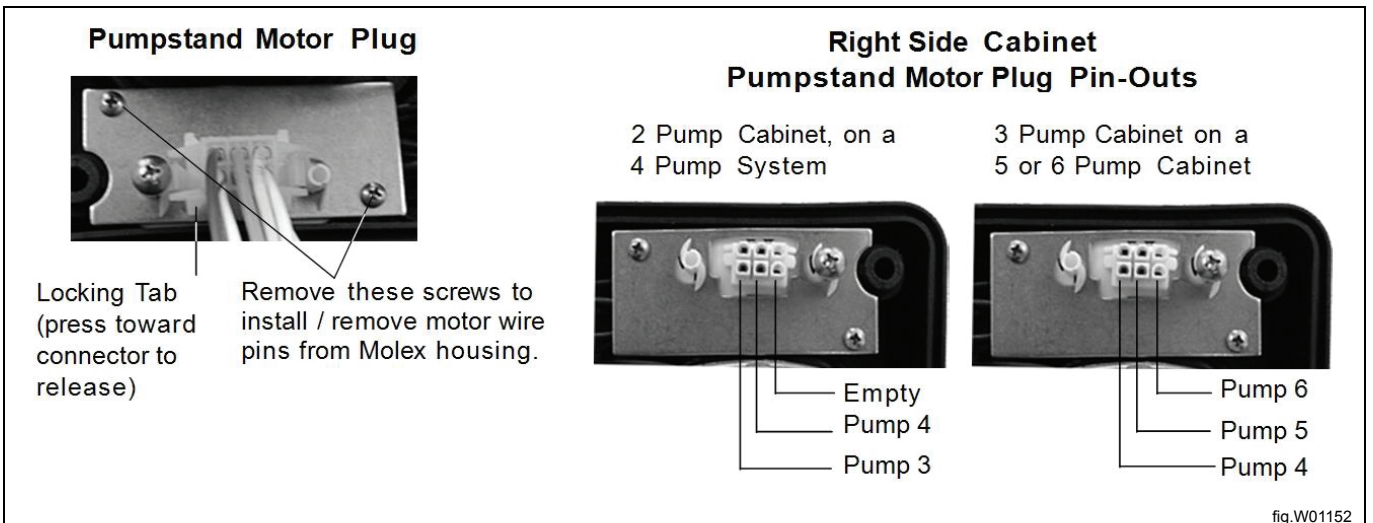


### Pumpstand Motor Plug

Locking Tab (press toward connector to release)

Remove these screws to install / remove motor wire pins from Molex housing.

### Right Side Cabinet
### Pumpstand Motor Plug Pin-Outs

2 Pump Cabinet, on a 4 Pump System

Empty
Pump 4
Pump 3

3 Pump Cabinet on a 5 or 6 Pump Cabinet

Pump 6
Pump 5
Pump 4

fig.W01152

**Power wiring**

Incoming power wiring from the Wiring Harness Plate Assembly connects to the Pump Interface Printed Circuit Board power terminal block (Found on Item 1, Replacement Parts List).

- 115 V
  The live wire goes to terminal 1. The neutral wire goes to terminal 4. Black jumper between terminal 1 and terminal 2. White jumper between terminal 3 and terminal 4.
- 208/230 V
  White jumper from terminal 2 to terminal 3

Motor voltage rating of installed motors must match power wiring configuration.